



# Frontenac, Lennox and Addington Science Fair

## FLASF 2022 AWARD WINNERS

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# Frontenac, Lennox and Addington Science Fair

## Best of Fair Awards

### Honourable Mention Plaques

(#2210) Canoe believe it?  
Student: Misha van Anders  
School: Calvin Park Public School

(#2309) Walking on Thin Ice  
Student: Ryan Layton-Matthews  
School: Calvin Park Public School

### Bronze Plaque and Trophy

(#4101) Exposure to glyphosate-based herbicide and zebrafish fin regeneration  
Student: Parmin Sedigh  
School: Loyalist Collegiate and Vocational Institute

### Silver Plaque and Trophy

(#2401) Discovery of Novel Gene Biomarkers to Improve CAR-T Cell Immunotherapy for Pancreatic Adenocarcinoma  
Student: Anjali Patel  
School: Calvin Park Public School

### Gold Plaque and Queen's University Trophy

(#2315) Roofing for a Green Future  
Student: Sebastien Menard  
School: King's Town School



# Frontenac, Lennox and Addington Science Fair

## Divisional Award Winners

### Human Health Science Division Awards - Primary Age Category

#### Honourable Mention

(#1405) The Sounds of Concentration  
Student: Kian Thakrar  
School: Lakeshore School

#### Bronze Medals

(#1402) How Your Blood Type, Ethnicity, and Eye Colour Intertwine  
Student: Kahvian Omrani  
School: Lakeshore School

(#1403) Does Music Soothe Anxiety?  
Student: Jayani Patel  
School: Lakeshore School

#### Silver Medal

(#1404) Exploring the Mind's Musical Side  
Student: Shreeya Darbar  
School: Lakeshore School

#### Gold Medal

(#1406) What are the Silver Linings of COVID-19 for Elementary School Age Children?  
Student: Allison Hanna  
School: Kingston Christian School

### Life and Earth Sciences Division Awards - Primary Age Category

#### Bronze Medal

(#1104) Edible Utensils  
Student: Jackson Louie  
School: Lakeshore School

#### Silver Medals

(#1102) Reducing Climate Change One Bite at a Time  
Student: Erika Kabin  
School: Lakeshore School



# Frontenac, Lennox and Addington Science Fair

(#1103) Wind Turbines and Wind Tunnels  
Student: Dylan Williams  
School: King's Town School

## **Gold Medal**

(#1105) Project Martian  
Student: Chloe Jugroot  
School: King's Town School

## **Physical and Mathematical Sciences Division Award - Primary Age Category**

### **Honourable Mention**

(#1201) Flawed Flour or Fantastic Flour  
Student: Brooke Berry  
School: Lakeshore School

## **Computing and Engineering Division Awards - Junior Age Category**

### **Honourable Mention**

(#2312) The Rainwheel  
Student: Wylder Ballantyne  
School: Calvin Park Public School

### **Bronze Medal**

(#2316) Click Now!  
Student: Echo Middaugh  
School: Calvin Park Public School

### **Silver Medals**

(#2311) The Touch Screen VS The Silver Screen  
Student: Cade Sleeth  
School: Calvin Park Public School

(#2313) Prosthetic Arms  
Student: Sid Kumar  
School: Lakeshore School



# Frontenac, Lennox and Addington Science Fair

## Gold Medals

(#2309) Walking on Thin Ice  
Student: Ryan Layton-Matthews  
School: Calvin Park Public School

(#2315) Roofing for a Green Future  
Student: Sebastien Menard  
School: King's Town School

## Human Health Science Division Awards - Junior Age Category

### Honourable Mentions

(#2403) On the relationship between dreams and wellbeing  
Student: Valerie Sun  
School: Calvin Park Public School

(#2410) I CAN'T HEAR YOU!  
Students: Luqmaan Brewster and Sharaf Karim  
School: Calvin Park Public School

### Bronze Medals

(#2405) Girls' Anxiety During the Pandemic  
Student: Priya Jugoon  
School: Calvin Park Public School

(#2406) The Extraordinary Duel - Dye vs Quantum Dots: Tracking its Effectiveness in Regards to Lymphoma  
Student: Fareeshay Sohail  
School: Calvin Park Public School

(#2424) Does presentation of food affect taste?  
Student: Tvisha Pavagadhi  
School: Calvin Park Public School

(#2426) What affect do my emotional states have on my body?  
Student: Sage McEneany  
School: Calvin Park Public School

(#2433) How COVID-19 Variants are Affecting the World  
Student: Joyce Pu  
School: Calvin Park Public School



# Frontenac, Lennox and Addington Science Fair

## Silver Medal

- (#2411) Building an Artificial Pancreas  
Student: Sofia de Bettignies  
School: King's Town School

## Gold Medals

- (#2401) Discovery of Novel Gene Biomarkers to Improve CAR-T Cell Immunotherapy for Pancreatic Adenocarcinoma  
Student: Anjali Patel  
School: Calvin Park Public School
- (#2425) Testing the effectiveness of antimicrobial scrubs in a medical setting: Are they worth the money?  
Students: Annabelle Mastorakos and Sadie Michelutti  
School: Calvin Park Public School

## Life and Earth Sciences Division Awards - Junior Age Category

### Honourable Mentions

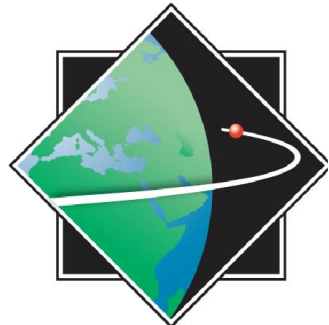
- (#2102) Beyond Our Planet | A Study on the Possibility of Alien Life  
Student: Oona Berger  
School: Calvin Park Public School
- (#2110) Plant Tea Party  
Student: Thomas Ripmeester  
School: Calvin Park Public School
- (#2126) The Plates of Change  
Student: Svara Patel  
School: Lakeshore School

### Bronze Medal

- (#2129) Hydroponics & Tackling Food Security 2.0  
Student: Wyatt Bailey  
School: Calvin Park Public School

### Silver Medals

- (#2128) Water You Drinking?  
Student: Zoe Nicholson  
School: King's Town School



# Frontenac, Lennox and Addington Science Fair

(#2133) Up or Out: An Investigation into the Energy Use of Vertical Farms

Student: Ethan Tian

School: Calvin Park Public School

## Gold Medals

(#2106) In the Minds of Horses: Colour

Students: Ines Koepl and Sarah Webster

School: Calvin Park Public School

(#2121) Will the Most Alcohol Beat Them All?

Student: Emily Nault

School: Calvin Park Public School

## Physical and Mathematical Sciences Division Awards - Junior Age Category

### Honourable Mentions

(#2202) Absorption of Radiant Energy by Different Colours

Student: Sebastian Amador Murillo

School: Calvin Park Public School

(#2205) Coiled Motors: Efficient or a Waste?

Student: Liam Heiden

School: Calvin Park Public School

### Bronze Medal

(#2211) Bang - Imploding Cans to Understand Particle Theory

Student: Max Meleschuk

School: Calvin Park Public School

### Silver Medal

(#2203) Positron Annihilation and Rocket Containment (PARC)

Student: Jacob Frank

School: Calvin Park Public School

### Gold Medal

(#2215) Optimised Designs for Vertical Loops

Student: Jesse Baillie

School: Calvin Park Public School





# Frontenac, Lennox and Addington Science Fair

## All Division Awards - Intermediate Age Category

### Honourable Mention

(#3303) Codage du code stratégique de César, incryptage simple et effectif

Students: Tony D'Alessio and Émil Yanis Fotso-Fokam

School: École Secondaire Marie-Rivier

### Silver Medals

(#3101) Sécurité routière: bactéries luminescentes

Student: Stephanie Bodog

School: École Secondaire Marie-Rivier

(#3302) Voulez-vous être attrapé par ce monsieur? Secure ton mot de passe!

Students: Blake Conod and William Levesque

School: École Secondaire Marie-Rivier

### Gold Medal

(#3401) Enhanced Detection of Aggression in Alzheimer's Disease by Quantum Dots

Student: Ashmaan Sohail

School: Kingston Secondary School

## All Division Awards - Senior Age Category

### Silver Medal

(#4202) How extending a flute's head joint affects the tuning of the flute

Student: Jonah Davidson-Harden

School: Loyalist Collegiate and Vocational Institute

### Gold Medals

(#4101) Exposure to glyphosate-based herbicide and zebrafish fin regeneration

Student: Parmin Sedigh

School: Loyalist Collegiate and Vocational Institute

(#4201) Investigation on the Acoustical Signatures of Wind Turbine Noise

Student: Addison Wu

School: Loyalist Collegiate and Vocational Institute



# Frontenac, Lennox and Addington Science Fair

## 2022 Special Award Winners

### ACFOMI Michel Sarrazin Award

\$50 Cash Prize and Certificate

(#3101) Sécurité routière: bactéries luminescentes

Student: Stephanie Bodog

School: École Secondaire Marie-Rivier

### Bespoke Skin MD Award in Health Sciences

Anatomy textbook, \$50 Book Gift Card and Certificate

(#3401) Enhanced Detection of Aggression in Alzheimer's Disease by Quantum Dots

Student: Ashmaan Sohail

School: Kingston Secondary School

### Canadian Science Fair Journal Peer Awards – Primary Category

STEM Book Prizes and Certificates

(#1103) Wind Turbines and Wind Tunnels

Student: Dylan Williams

School: King's Town School

(#1105) Project Martian

Student: Chloe Jugroot

School: King's Town School

### Canadian Science Fair Journal Peer Awards – Junior Category

STEM Book Prizes and Certificates

(#2102) Beyond Our Planet | A Study on the Possibility of Alien Life

Student: Oona Berger

School: Calvin Park Public School

(#2202) Absorption of Radiant Energy by Different Colours

Student: Sebastian Amador Murillo

School: Calvin Park Public School

(#2301) Building a Simple CO2 Monitor

Student: Matthew Kabin

School: Calvin Park Public School



# Frontenac, Lennox and Addington Science Fair

(#2309) Walking on Thin Ice  
Student: Ryan Layton-Matthews  
School: Calvin Park Public School

## Canadian Science Fair Journal Peer Award – Intermediate and Senior Categories

STEM Book Prize and Certificate

(#4202) How extending a flute's head joint affects the tuning of the flute  
Student: Jonah Davidson-Harden  
School: Loyalist Collegiate and Vocational Institute

## City of Kingston - Best Environmental Project Award

\$100 Cash Prize

(#2129) Hydroponics & Tackling Food Security 2.0  
Student: Wyatt Bailey  
School: Calvin Park Public School

## INVISTA (Canada) Award for Innovation and Principled Entrepreneurship – Primary Category

\$100 Cash Prize

(#1104) Edible Utensils  
Student: Jackson Louie  
School: Lakeshore School

## INVISTA (Canada) Awards for Innovation and Principled Entrepreneurship – Junior Category

\$250 Cash Prize

(#2203) Positron Annihilation and Rocket Containment (PARC)  
Student: Jacob Frank  
School: Calvin Park Public School  
(#2309) Walking on Thin Ice  
Student: Ryan Layton-Matthews  
School: Calvin Park Public School



# Frontenac, Lennox and Addington Science Fair

## **INVISTA (Canada) Awards for Innovation and Principled Entrepreneurship – Junior Category Runners-Up**

\$175 Cash Prize

(#2303) Smart Bin: An automatic waste sorting system

Student: Shail Patel

School: Calvin Park Public School

(#2315) Roofing for a Green Future

Student: Sebastien Menard

School: King's Town School

## **INVISTA (Canada) Award for Innovation and Principled Entrepreneurship – Intermediate Category**

\$350 Cash Prize

(#3101) Sécurité routière: bactéries luminescentes

Student: Stephanie Bodog

School: École Secondaire Marie-Rivier

## **Kingston Field Naturalists Award**

Book Gift Certificate

(#1101) Pellet Dissection

Student: Toby Nuttall

School: King's Town School

## **Ontario Association of Certified Engineering Technicians and Technologists (OACETT) Award**

\$100 Cash Prize and Certificate

(#2303) Smart Bin: An automatic waste sorting system

Student: Shail Patel

School: Calvin Park Public School

## **Professional Engineers of Ontario Award - 1st Place**

\$300 Cash Prize

(#4201) Investigation on the Acoustical Signatures of Wind Turbine Noise

Student: Addison Wu

School: Loyalist Collegiate and Vocational Institute



# Frontenac, Lennox and Addington Science Fair

## Professional Engineers of Ontario Award - 2nd Place

\$200 Cash Prize

(#2309) Walking on Thin Ice

Student: Ryan Layton-Matthews

School: Calvin Park Public School

## Professional Engineers of Ontario Award - 3rd Place

\$100 Cash Prize

(#2303) Smart Bin: An automatic waste sorting system

Student: Shail Patel

School: Calvin Park Public School

## Queen's University Department of Biology Awards

\$50 Book Prizes

(#1105) Project Martian

Student: Chloe Jugroot

School: King's Town School

(#2106) In The Minds of Horses: Colour

Students: Ines Koepl and Sarah Webster

School: Calvin Park Public School

(#4101) Exposure to glyphosate-based herbicide and zebrafish fin regeneration

Student: Parmin Sedigh

School: Loyalist Collegiate and Vocational Institute

## Queen's University Department of Biology Eco-Adventure Camp Award

Week at Eco-Adventure Camp Certificate

(#2210) Canoe Believe it?

Student: Misha van Anders

School: Calvin Park Public School



# Frontenac, Lennox and Addington Science Fair

## Queen's University Department of Biomedical and Molecular Sciences Award for Medicines, Drugs and Food

\$60 Cash Prize, a Certificate and a tour of Biomedical and Molecular Sciences at Queen's (#3401) Enhanced Detection of Aggression in Alzheimer's Disease by Quantum Dots

Student: Ashmaan Sohail  
School: Kingston Secondary School

## Queen's University Department of Biomedical and Molecular Sciences Awards for the Amazing Human Body

\$60 Cash Prizes, a Certificate and a tour of Biomedical and Molecular Sciences at Queen's (#2408) The "Five-Second Rule's" Effect on Bacteria Growth on Foods

Student: Freja Jowett  
School: Calvin Park Public School

(#2411) Building an Artificial Pancreas

Student: Sofia de Bettignies  
School: King's Town School

## Queen's University Department of Biomedical and Molecular Sciences Awards for the Microscopic World

\$60 Cash Prizes, a Certificate and a tour of Biomedical and Molecular Sciences at Queen's (#2412) Caffeine - The Effects It Has on the Human Body

Student: Rofaida Elkhmri  
School: Calvin Park Public School

(#2418) Hydroponic Farming

Student: Hannah Medd  
School: Calvin Park Public School

## Queen's University Department of Chemistry Award

\$200 Cash Prize

(#2104) Clean, Green, Energy Machine - the relationship between Photosynthesis and ATP

Students: Rufus Hand and Shayon Majumdar  
School: Calvin Park Public School



# Frontenac, Lennox and Addington Science Fair

## Queen's University Department of Geography and Planning Explore Camp Award

Week at Explore Camp Certificate  
(#1102) Reducing Climate Change One Bite at a Time  
Student: Erika Kabin  
School: Lakeshore School

## Queen's University Department of Mechanical and Materials Engineering Award

\$100 Cash Prize  
(#2210) Canoe Believe it?  
Student: Misha van Anders  
School: Calvin Park Public School

## Queen's University Department of Pathology and Molecular Medicine Award - 1st Place

\$100 Cash Prize and Certificate  
(#1403) Does Music Soothe Anxiety?  
Student: Jayani Patel  
School: Lakeshore School

## Queen's University Department of Pathology and Molecular Medicine Award - 2nd Place

\$75 Cash Prize and Certificate  
(#2407) Dissociative Identity Disorder (DID) Research Study  
Student: Liam Lomax  
School: Calvin Park Public School

## Queen's University Department of Pathology and Molecular Medicine Award - 3rd Place

\$50 Cash Prize and Certificate  
(#2420) The Silent Disease: Osteoporosis  
Student: Riya Patel  
School: Lakeshore School



# Frontenac, Lennox and Addington Science Fair

## Queen's University Department of Physics, Engineering Physics and Astronomy Awards

\$150 Cash Prizes

(#2207)      Effects on Magnetism  
Student:      Charlie Walker  
School:        Calvin Park Public School

(#2215)      Optimised Designs for Vertical Loops  
Student:      Jesse Baillie  
School:        Calvin Park Public School

## Queen's University School of Computing Award

\$100 Cash Prize

(#2303)      Smart Bin: An automatic waste sorting system  
Student:      Shail Patel  
School:        Calvin Park Public School

## Queen's University School of Environmental Studies Awards

\$50 Book Prizes

(#1102)      Reducing Climate Change One Bite at a Time  
Student:      Erika Kabin  
School:        Lakeshore School

(#2128)      Water You Drinking?  
Student:      Zoe Nicholson  
School:        King's Town School

(#2133)      Up or Out: An Investigation into the Energy Use of Vertical Farms  
Student:      Ethan Tian  
School:        Calvin Park Public School

(#2315)      Roofing for a Green Future  
Student:      Sebastien Menard  
School:        King's Town School





# Frontenac, Lennox and Addington Science Fair

## Queen's University Engineering Society Science Quest Award

Week at Science Quest Camp Certificate

(#2316) [Click Now!](#)

Student: Echo Middaugh  
School: Calvin Park Public School

## Queen's University Engineering Society Science Quest Award

Week at Girls' Quest Camp Certificate

(#2302) Revolutionizing Modern Freight Transportation with Zero Carbon Emissions

Student: Addison Mildenberger  
School: Calvin Park Public School

## Queen's University Engineering Society Science Quest Award

Week at Eco Camp Certificate

(#2309) Walking on Thin Ice

Student: Ryan Layton-Matthews  
School: Calvin Park Public School

## Royal Military College of Canada Department of Military Psychology and Leadership Awards

\$50 Book Prizes

(#1405) The Sounds of Concentration

Student: Kian Thakrar  
School: Lakeshore School

(#2201) Their Battle Will Be Legendary: Finding The Relationship Between Maze  
Dimensions And Difficulty

Student: Jack Venditti  
School: Calvin Park Public School

(#2405) Girls' Anxiety During the Pandemic

Student: Priya Jagoon  
School: Calvin Park Public School



# Frontenac, Lennox and Addington Science Fair

## Sanofi Biogenius Canada Award

\$100 Cash Prize

(#2401) Discovery of Novel Gene Biomarkers to Improve CAR-T Cell Immunotherapy for Pancreatic Adenocarcinoma

Student: Anjali Patel

School: Calvin Park Public School

## St. Lawrence College Behavioural Science Award

\$100 Cash Prize

(#1102) Reducing Climate Change One Bite at a Time

Student: Erika Kabin

School: Lakeshore School

## St. Lawrence College Faculty of Applied Science Award

\$100 Cash Prize

(#4101) Exposure to glyphosate-based herbicide and zebrafish fin regeneration

Student: Parmin Sedigh

School: Loyalist Collegiate and Vocational Institute

## St. Lawrence College Health Science Award

\$100 Cash Prize

(#2425) Testing the effectiveness of antimicrobial scrubs in a medical setting: Are they worth the money?

Students: Annabelle Mastorakos and Sadie Michelutti

School: Calvin Park Public School

## St. Lawrence College President's Award

\$100 Cash Prize

(#2315) Roofing for a Green Future

Student: Sebastien Menard

School: King's Town School

## St. Lawrence College Research Department Award

\$100 Cash Prize

(#2128) Water You Drinking?

Student: Zoe Nicholson

School: King's Town School



# Frontenac, Lennox and Addington Science Fair

## **The Leo Enright Award for Astronomy**

\$100 Cash Prize and Book: Explore the Universe Guide

(#1105) Project Martian

Student: Chloe Jugroot

School: King's Town School

## **University of Ottawa Entrance Scholarship Award**

\$1000 Entrance Scholarship

(#4101) Exposure to glyphosate-based herbicide and zebrafish fin regeneration

Student: Parmin Sedigh

School: Loyalist Collegiate and Vocational Institute